

Claims

1) Overhead transport system able to actuate the selective drawing of garment lots, characterized by the fact of making use of a support rail (1) into which is cut, on the top, a longitudinal groove (2), with a "U"-shaped section, for the purpose of holding on the bottom several means (4) that are capable
5 of lifting one or more tracks (5), situated above, also in the said groove (2), in charge of containing and precisely guiding the forward motion of a drawing means that runs in a closed circuit (7) along the support rail (1), provided with a regular sequence of protruding features (7a) suited to delimit between them a sequence of hollows (7b) and therefore capable of interfering with the
10 hooks (G) of the hangers hanging on the said support rail (1), at the very moment when the said appropriate means (4) enable the lifting, until a suitable stop point at the top, of the said track or tracks (5); besides, the said track or tracks (5) are also subject to a subsequent sliding downwards, until a stop point at the bottom, such as to remove the interference between the
15 sections of the drawing features (7) and the hanger hooks themselves (G), as soon as the lifting means (4) situated below are deactivated.

2) System according to claim 1, characterized by the fact of having a sequence of liftable tracks (5) with a rigid structure, each one of them being associated with a lifting means (4) situated below.

20 3) System according to claim 1, characterized by the fact of having a single continuous liftable track (5), with a slim and flexible structure, associated with a sequence of lifting means (4) situated below.

4) System according to one or more of the above claims, characterized by the fact that the said means in charge of lifting the said track or tracks (5) are
25 made of tube segments (4), of circular section, placed longitudinally on the bottom of the above-mentioned groove (2), suited for being inflated and then deflated in order to modify their section profile and therefore also the space they occupy in height; the said track or tracks (5) present a saddle (5a) below, which links up perfectly with the profile of the tube segments (4)
30 situated below.

5) System according to one or more of the previous claims, characterized by the fact that the above-mentioned stop point at the top for the track or tracks (5) is represented by two teeth (2b), cut out in the opening of the said higher groove (2) of the support rail (1), suitable for interfering with two
5 corresponding steps (5c) placed near the top of each of the said tracks (5); whereas the above-mentioned stop point at the bottom for the same track or tracks (5), is represented by a pair of steps (5c) cut out on the opposed sides of the said groove (2).

6) System according to one or more of the previous claims, characterized by
10 the fact that the said support rail (1) presents a second longitudinal groove (3), totally closed and not communicating with the said groove (2) situated above, for the precise positioning of a fixed track (3), in charge of containing and guiding the forward motion of the above-mentioned drawing means (7) on its return trajectory, parallel to the "operational" trajectory which is
15 delimited and contained by the said liftable track or tracks (5) but in the other direction.

7) System according to one or more of the previous claims, characterized by the fact that the said support rail (1) presents at the top a rounded profile due to an opposed pair of identical strips (6) applied to the sides of the opening of
20 the said higher groove (2) of the support rail (1), that centrally delimit a longitudinal slot (6a) which is only slightly wider than the protruding features (7a) of the above-mentioned drawing feature (7).

8) System according to one or more of the previous claims, characterized by the fact that the said support rail (1) presents on the outside an longitudinal
25 absorbing profile (8) suitable for interfering with the subvertical section of the hanger hooks (G) hanging on the support rail itself (1).

9) System according to one or more of the previous claims, characterized by the fact that the said support rail (1) has, on the opposite side to the one where the above-mentioned absorbing profile is applied (8), some horizontal
30 plates (1a) for the connection to appropriate support means.

10) System according to one or more of the previous claims, characterized by the fact that the said closed circuit drawing feature consists of a chain (7) with

a regular sequence of links that are edgeways (7a) and links that are flat (7b).

11) System according to claim 8, characterized by the fact the the above-mentioned liftable track or tracks (5) and the above-mentioned fixed track (3a) bear grooves (5b, 3b) at the top, suited to contain exactly the lower
5 semicircumferences of the links set edgeways (7a) of the above-mentioned chain (7).

12) System according to one or more of the previous claims, characterized by the fact that the said closed circuit drawing feature consists of a toothed belt.